To: Ferrell, Mark[Ferrell.Mark@epa.gov]

From: Seneca, Roy

Sent: Wed 2/12/2014 12:36:11 PM

Subject: RE: Charleston Gazette (2-12) Study to test home plumbing for MCHM

Just another day in God's country...

From: Ferrell, Mark

Sent: Wednesday, February 12, 2014 7:31 AM

To: Seneca, Roy

Subject: Re: Charleston Gazette (2-12) Study to test home plumbing for MCHM

The slurry spill is yesterdays news. Today its expected to rain frogs. Tomorrow swarms of locusts arrive....

From: Seneca, Roy

Sent: Wednesday, February 12, 2014 7:27:51 AM

To: Garvin, Shawn; Ryan, Daniel; Early, William; D'Andrea, Michael; schafer, joan; White, Terri-A; Smith, Bonnie; Sternberg, David; Heron, Donna; Ferrell, Mark; Miller, Linda; Capacasa, Jon; Arguto, William; binetti, victoria; saxe, jennie; damm, thomas; Wisniewski, Patti-Kay; Hodgkiss, Kathy; Burns, Francis; Heston, Gerald; Matlock, Dennis; Wright, Dave; duteau, helen; Rose, Kenneth

Subject: Charleston Gazette (2-12) Study to test home plumbing for MCHM

Study to test home plumbing for MCHM

Team will research safety, odor and reaction to pipes

By Ken Ward Jr.

By David Gutman

CHARLESTON, W.Va. -- West Virginia will fund an independent team of experts to test water in homes to try to determine long-term effects of the Elk River chemical spill, Gov. Earl Ray Tomblin announced Tuesday.

Over the next three weeks, the team will test water in the home plumbing systems of 10 private homes: one in each of the nine affected counties, plus an extra home in Kanawha County.

The study -- called the West Virginia Testing Assessment Project, or WVTAP -- will have three main objectives. The team will convene a group of independent experts to evaluate the West Virginia's testing threshold of 10 parts per billion of Crude MCHM in water -- its usefulness as well as its limitations.

Second, a team of four scientists, let by Andrew Whelton, an environmental scientist from the University of South Alabama, will test water in homes to try to determine how Crude MCHM, and the other spilled chemical, PPH, interact with, and potentially stick to, different types of pipes.

Finally, the study also wants to find out the odor threshold of Crude MCHM -- how little of the chemical can be in the water in order for people to be able to smell it.

"The scale of chemical contamination of the drinking water in Charleston, W.Va., has been unprecedented," Whelton said at a Tuesday-evening news conference with Tomblin. "There is so little data available, many federal and state agencies could not and still cannot answer all the questions West Virginians are demanding to be answered."

Jeffrey Rosen, of Corona Environmental Consulting, will help Whelton conduct the study.

The 10 homes already have been selected. They are homes of people Whelton has been in touch with since he first arrived in West Virginia to do water crisis-related research three weeks ago.

Whelton's team will go into the homes accompanied by staff from local volunteer fire departments. They will sample hot and cold water -- about 21 gallons -- from the kitchen and the most commonly used bathroom. They will examine the plumbing, as different homes may have copper, iron, PVC or other plastic pipes.

Testing will be done at independent labs, and Whelton's team will not report to any state agency.

Once the initial round of 10 home tests is complete, the team will release preliminary results. They will then do more than 100 tests in additional homes around the region, Whelton said.

Tomblin has committed \$650,000 from the state budget to fund the study, but he admitted Tuesday that that probably would not be nearly enough money. He said he has asked West Virginia's congressional delegation for help in securing federal money to further fund the study.

Asked how much federal money he thought would be needed, Tomblin said, "A lot."

"To be frank, this is an unprecedented disaster," Whelton said, adding that "\$650,000 is a lot of money, but long-term monitoring is needed."

He said that with the help of the National Science Foundation and the National Institutes of Health, researchers need to begin more toxicological studies and animal studies as soon as possible.

Tomblin said West Virginia American Water President Jeff McIntyre told him at their last meeting that the company would offer money for home testing if the state needed it. The governor said they have not yet requested any financial assistance.

At a news conference last week, federal officials repeatedly said they thought home testing would not be necessary or helpful. Tomblin did not specifically rule it out, but he was far from enthusiastic about the prospect.

He changed course a few hours after that news conference, saying his administration would look into home testing.

Asked what changed his mind, Tomblin said it was obvious that people wanted their homes tested. He said it was impossible to test every home in the region, but since the chemical's licorice smell has persisted in many places, they would do some home testing.

State and federal officials have said residents can resume using water from West Virginia American Water's regional system, citing test results showing levels of Crude MCHM were below a controversial 1-part-per-million "screening level" set by the federal Centers for Disease Control and Prevention. But government officials have done no testing inside people's homes.

West Virginia residents in the spill area increasingly have been asking why the state Department of Health and Human Resources and the National Guard are testing water for MCHM only at the water treatment plant, at fire hydrants and in some public buildings, such as schools.

Outside experts have expressed concern that the MCHM and other chemicals from the leak could have been absorbed by home plumbing systems, where it could continue to leach into water -- even if only in very small amounts -- for some undetermined amount of time.

Whelton has compared pipes to a sponge, in which the chemicals could be quickly absorbed but perhaps not so quickly expelled over time.

At last week's news conference, officials from the U.S. Environmental Protection Agency said they have a study that disputes this theory, but they have not released a copy of the study.

EPA regional drinking-water chief Bill Arguto suggested a reporter could get a copy from West Virginia American Water. The water company has not responded to a request for the study.

On Tuesday the EPA declined to release the study, citing "water security" issues.

During a congressional hearing on Monday, state Bureau for Public Health Commissioner Dr. Letitia Tierney referenced the study and said that MCHM has a low "partition coefficient," meaning it is unlikely to stick to pipes. Tierney also said federal officials are still looking at the

issue.

Whelton said he is familiar with the study cited by the EPA but said it doesn't have enough information to come to any conclusions.

"I would say we don't know," Whelton said when asked how sticky the chemical might be to home pipes. "There is no data for helping West Virginians understand chemical interaction with plumbing pipe materials.

"There are too many unknowns, and the health and safety of hundreds of thousands of West Virginians and U.S. citizens is in question."

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